

cool them in ice box and serve with aspic jelly. Season to suit taste.

(A pleasant variation of this is to mould the squab in the jelly).

**Boned Chicken with Jelly.** Take one young chicken, about four pounds, bone raw, fill it with stuffing made of two pounds of lean veal, one pound of lean pork and one pound of fat fresh pork, season to taste. Open chicken, lay flat on table and put filling in, add truffles, cold tongue and pistachio bean in layers on filling. Tie up tightly, then boil slowly about two hours. Wrap in cheesecloth after boiling is over, then draw cheesecloth tighter to fowl and set away in ice box to cool. It should be shaped and pressed together easily.

**Jellied Consomme.** Five pounds of chopped beef from shin of beef, a few mixed vegetables, some cloves, pepper, salt and a piece of bay leaf, one-quarter of a nutmeg grated, five quarts of clear water. Boil slowly one hour, then strain through cheesecloth and set in ice box to jelly. Before boiling add whites of eggs to clear it.

**Aspic Jelly.** Aspic jelly for all boiled fowl is made with same recipe as consomme, only one pint of white wine, lemon juice and four ounces of gelatine must be added. Cool in the ice box.—Ex.

10. The Sweetest things on Earth.—Kisses.

Mrs. G. D. S.

#### Ten Commandments of Hygiene.

1. Rise early, retire early, and fill your day with work.
2. Water and bread maintain life; pure air and sunshine are indispensable to health.
3. Frugality and sobriety form the best elixir of longevity.
4. Cleanliness prevents rust; the best cared for machines last the longest.
5. Enough sleep repairs waste and strengthens; too much sleep softens and enfeebles.
6. To be sensibly dressed is to give freedom to one's movements and enough warmth to be protected from sudden changes of temperature.
7. A clean and cheerful house makes a happy home.
8. The mind is refreshed and invigorated by distractions and amusement; but abuse of them leads to dissipation, and dissipation to vice.
9. Cheerfulness makes love of life, and love of life is half of health. On the contrary, sadness and discouragement hastens old age.
10. Do you gain your living by your intellect? Then do not allow your arms and legs to grow stiff. Do you earn your bread by your pickaxe? Do not forget to cultivate your mind and to enlarge your thought.—Ex.

#### A Curious Sea Animal.

Among the curious animals which inhabit the sea we may take the holothuria, or sea cucumber, so called from its resemblance to the common vegetable cucumber, says the London Tid-Bits. When this animal is attacked by an enemy it does not stand up and fight, but by a sudden movement it ejects its teeth, stomach, digestive apparatus and nearly all of its intestines, and then shrivels its body up to almost nothing. When, however, the danger is past, the animal commences to replace the organs which it has voluntarily parted with and in a

short time it is as perfect as ever it was.

Dr. Johnstone kept one in water for a long time, and one day he forgot to change the water. The creature in consequence ejected its intestines and shriveled up, but when the water was changed all its organs were reproduced. Although the animal is not eaten in Europe, it is a favorite with the Chinese, and the fishing forms an important part of the industry of the East. Thousands of junks are annually used in fishing for trepang, as the animals are called.—Ex.

#### Concerning Soil Fertility.

The chief of the bureau of soils at Washington, Milton Whitney, has delivered an address before a Maryland farmer's club which has been published as a bulletin by the department of agriculture. Selections and condensations follow:

Fertility is a property inherent in the soil; it is what the soil is capable of doing under the best possible conditions. The yield of crops, on the other hand, is not dependent upon the fertility alone. If your seed is not properly selected, if your planting season is too early or too late, if the soil is not properly cultivated, if the climatic conditions are not favorable, your crop yield may be affected; but the fertility of the soil—that inherent power of the soil under the best conditions to produce a crop—will not necessarily be impaired.

The fertility of the soil is dependent upon four principal facts, viz: Plants must breathe; plants must drink; plants must feed; plants must have a proper sanitary environment.

We all understand that the breathing of a plant is mainly through the leaves; but the soil also may be a very important factor in the breathing of plants, as it is necessary to have a supply of oxygen around the roots.

We know perfectly well that cultivation of the soil is important or necessary for the best development of many crops, and we say that it is in order to introduce oxygen and make possible the introduction of more water into the soil. The investigations of the bureau of soils seem to indicate that the actual supply of oxygen to the roots may not be the only or even the most important function of cultivation. It seems necessary not only to introduce air into the soil, but by stirring the soil to permit the escape of noxious gases that are perhaps given off by the plants themselves or produced by bacterial action on the remains or excreta of plants.

The plant is exceedingly sensitive to gases. On the streets of Washington one of the principal causes of the death of trees is leaks in gas pipes; every year hundreds and perhaps thousands of trees have to be removed and the usual cause is a leaking gas pipe. The amount of gas is so small that it cannot be detected by the odor, but the influence of the gas on the roots is so pronounced that the tree suffers and is likely to die. It seems probable that the ventilation of the soil is not only to allow air to enter but to allow gases formed in the soil to escape. Furthermore, the air must enter not only for the use of the roots itself, but also to oxidize the organic matters given off by the plants—to preserve the proper sanitary conditions in the soil. Ventilation to remove noxious gases

might increase the yield without affecting the fertility. Ventilation for the purpose of oxidizing organic matter might affect fertility itself.

Plants must drink. It has been supposed that the root is fixed in the soil, and that the water, with the food material which it contains, moves up to the root in a constant supply through capillary attraction. We find, however, in measuring the rate of movement of water in a soil moderately dry or in fair moisture condition as regards the needs of plants that the movement is so slow as to be negligible. The root of a plant is absorbent for water and for mineral matter only at the tip and for a very short distance back from the tip—only a small fraction of an inch of the root that actually absorbs water and mineral food. This portion of the root is only absorbent for a few days, probably for not more than three or four days. As the tip is extended into new fields of moisture and plant food, the part that was absorbent yesterday ceased to be absorbent today. There is therefore no reason why water should move up to the plant from any considerable distance, for the plant itself constantly moves its feeding roots out into new fields.

#### Competition in Agriculture.

It is not profitable to cultivate land which is not improving in quality, increasing in fertility, all the time. The importance of this fact is clearly shown in an editorial in the Epitomist.

The rapid extension of internal improvements, such as railroads and canals, are facts placing the agriculturists of the whole nation in a situation to compete with each other on nearly equal terms, so far as the expense of transportation to market in the sale of all the products of the country is concerned. The consequence must be that every section will be compelled to confine itself to the cultivation of such articles only as are best adapted to its climate and soil. There is no apprehension that our agriculturists will ever degenerate and fall back to the unskillful, inefficient labor of the careless cultivator, with his unimproved appliances. As far as the prosperity of this leading occupation depends upon the skillful and judicious cultivation of the earth, it is not only certain not to recede, but to advance.

The prosperity of the agriculturist is also promoted not only by improvements in the process of his industry, but improvements in all other arts. The products of agriculture, being articles of prime necessity, have at nearly all times the same intrinsic value, though their exchangeable value varies greatly, but a great number of other manufacturers have contributed to increase the exchangeable value of agricultural products, and it is obvious that these advantages are as permanent as the application of mechanical power that has given birth to them. It is the growth of various manufactures in our own and other countries, and the improved means of transportation, by which these manufactures are brought to our doors, that have contributed to secure a bet-

#### Cures Woman's Weaknesses.

We refer to that boon to weak, nervous, suffering women known as Dr. Pierce's Favorite Prescription.

Dr. John Fyfe one of the Editorial Staff of THE ECLECTIC MEDICAL REVIEW says of Unicorn root (*Helonias Dioica*) which is one of the chief ingredients of the "Favorite Prescription":

"A remedy which invariably acts as a uterine invigorator \* \* \* makes for normal activity of the entire reproductive system." He continues "in *Helonias* we have a remedy which more fully answers the above purposes than any other drug with which I am acquainted. In the treatment of diseases peculiar to women it is seldom that a case is seen which does not present some indication for this remedial agent." Dr. Fyfe further says: "The following are among the leading indications for *Helonias* (Unicorn root). Pain or aching in the back, with leucorrhoea; atonic (weak) conditions of the reproductive organs of women, mental depression and irritability, associated with chronic diseases of the reproductive organs of women; constant sensation of heat in the region of the kidneys; menorrhagia (flooding), due to a weakened condition of the reproductive system; amenorrhoea (suppressed by absent monthly periods), arising from or accompanying an abnormal condition of the digestive organs and anæmic (thin blood) habit; dragging sensations in the extreme lower part of the abdomen."

If more or less of the above symptoms are present, no invalid woman can do better than take Dr. Pierce's Favorite Prescription, one of the leading ingredients of which is Unicorn root, or *Helonias*, and the medical properties of which it most faithfully represents.

Of Golden Seal root, another prominent ingredient of "Favorite Prescription," Prof. Finley Ellingwood, M. D., of Bennett Medical College, Chicago, says:

"It is an important remedy in disorders of the womb. In all catarrhal conditions and general enfeeblement, it is useful."

Prof. John M. Scudder, M. D., late of Cincinnati, says of Golden Seal root:

"In relation to its general effects on the system, there is no medicine in use about which there is such general unanimity of opinion. It is universally regarded as the tonic useful in all debilitated states."

Prof. R. Bartholow, M. D., of Jefferson Medical College, says of Golden Seal:

"Valuable in uterine hemorrhage, menorrhagia (flooding) and congestive dysmenorrhoea (painful menstruation)."

Dr. Pierce's Favorite Prescription faithfully represents all the above named ingredients and cures the diseases for which they are recommended.

ter reward for agricultural industry.

Farmers are beginning to discover that the occupation of exhausted land, poorly cultivated, cannot successfully compete with the judicious cultivation of improved, rich and well tilled land, because the latter with less expense, can make two bushels of grain to his one, and because this great disparity must every year increase in proportion to the progressive exhaustion of the first and the improvement of the latter. The cost of production must be reduced and the yield increased. The profit can only be derived when the receipts exceed the expenses, and as each individual farmer is compelled to compete with the others, only the most improved implements and appliances can be depended upon to derive the greatest gain at the lowest cost.

That a total revolution in all methods of farming will soon be effected admits of no reasonable doubt. As the farmers constitute a large class among the producers of wealth they must keep abreast of the leaders in the march of progress. They should be ready for any change that may occur by acquiring all information which is necessary to enable them to adopt their course to that new state of things by which they will some time be surrounded, and to which they must accommodate themselves if they wish to participate in the general prosperity which awaits the intelligent and industrious cultivators of the soil. The spirit of agricultural improvement is aroused and is extending itself rapidly over the whole country producing a sharp competition between old and new methods, the former founded upon old and obsolete customs and the latter on the latest discoveries and improvements in agricultural science.